destruction proceeds the shadow of the lamina quadrilateral disappears.

Contrary to many reports scant importance is to be attached to the shadow of the posterior clinoid process since they may be hidden within the shadow of the quadrilateral plate, may be physiologically absent or may appear to be present when absent.

The floor of the sella is sometimes level, sometimes slightly concave, sometimes deeply hollowed. It should appear as a fine regular opaque line. With faulty projection or when markedly depressed it may exhibit a double contour.

The anterior clinoid processes may throw shadows on the same level below or above that cast by the tubercle, and their inferior margin makes different angles with the anterior fossa wall. They are extra-sellar and it is unsafe to argue that the small inclined shadows sometimes cast by them result from atrophic processes within or above the fossa.

Abnormal clinoid processes are not infrequently physiologically present. They may prevent an exact interpretation of the shape of the sella, and if a bridge of bone unite the superior extremity of the quadrilateral plate with the anterior clinoid process it may be taken by the inexperienced for the floor of the fossa, as may also the shadow cast by the middle fossa of the skull.

In some plates shadows of increased density due to elevated bony bosses on the inner skull table appear within the cavity of the fossa. They must not be mistaken for concretions.

From the above description it is evident that while extensive changes of the fossa and its adnexa are recognizable at a glance much experience is needed before deciding that minor changes are indicative of diseased processes, and it must be remembered that destructive lesions other than those arising from the pituitary gland may involve the region of the fossa and its adnexa, and that a large fossa may be found in patients suffering from extra-hypophyseal intracranial growths or from hydrocephalus.

In addition to an abnormal fossa outline the radiogram of the acromegalic skull exhibits irregularity of the cranial parietes, enlarged frontal and maxillary fossæ, an exaggerated post lambdoidal prominence, and an enlarged prognathous jaw.

Variations in the symptomatology. Though change in bulk is commonly associated with change in function yet either one may occur whilst the other remains within the limits of the normal. Various combinations of symptoms and signs thus occur, sometimes those due to pituitary malfunction, sometimes those due to increased intracranial pressure, sometimes those due to local pressure effects being most in evidence. In other cases concomitant symptoms having no relation to the coexisting pituitary tumor are complained of. occurrence of general and local pressure symptoms alone suggests a cystic growth. Syphilis and tuberculosis may occasionally attack the gland and be associated with lesions of like nature in other organs.

Some of the patients with pituitary disease will first visit the oculist, others the gynecologist, others the internist. There is no short road to their correct diagnosis. Familiarity with the subject at hand, a routine complete method of physical examination and of laboratory investigation, the use of the perimeter and the correct interpretation of technically good radiograms, these are the essentials which will enable us to recognize lesions of the hypophysis.

#### NOTE.

The literature dealing with the hypophysis is quite extensive. I have purposely omitted references, but would express my indebtedness in preparing this article not only to those named in the text, but also to Delille, Thaon, Herbert Fisher, Jameson Evans, and Melchior.

### REPORT ON MEDICAL EDUCATION.\*

By W. F. SNOW, M. D., Sacramento.

To the President, Thomas W. Huntington. Dear Sir:

As representative from California, I attended the series of Conferences held in Chicago February 26th-March 1st, 1912, inclusive. These conferences were as follows:

- I. Conference of A. M. A. on Medical Education.
- 2. Conference of A. M. A. on Medical Legislation.
- 3. Conference of A. M. A. on Public Health.
- 4. Conference of State Medical Examining & Licensing Boards.
- 5. Annual Meeting of Association of American Medical Colleges.

All of these meetings were well planned, full of interest, and well attended.

#### MEDICAL EDUCATION.

The most interesting discussions during the sessions on medical education centered about the subjects of practical examinations for the licensing of medical graduates; and the relation of the medical school to a fifth or hospital year.

Mr. Frederic G. Hallett, Secretary of the Conjoint Examining Board of England, presented in detail the successful practical examinations conducted by his organization. Mr. Hallett demonstrated that the practical part of the English examinations can be given properly at the rate of two hours and ten minutes for each twenty-four In the United States at least nine applicants. states have adopted some form of practical examinations. Among these Massachusetts, Ohio, Wisconsin, Colorado, Nebraska and Utah seem to have made considerable progress in this direction. New York is considering the acceptance of one year in an accredited hospital service in lieu of a prac-Indiana empowers the State tical examination.

<sup>\*</sup>Read before the Forty-Second Annual Meeting of the State Society, Del Monte, April, 1912.

Licensing Board to fix the standards of medical schools and considers that this insures the practical nature of the training received. Pennsylvania's new law also places medical schools under the supervision of the Bureau of Medical Education and Licensure. Michigan proposes a general staff of non-paid appointed examiners throughout the state to mark the written part of examinations (50%) and a paid staff of practical examiners to give a practical laboratory and clinical examination (50%).

It was very generally agreed that too much time is being required of the medical student. Statistics were presented to show that the majority of medical schools require 8,000 to 9,000 hours of work from the student, whereas, better results would be obtained by requiring 5,000 hours (or an average of eight hours per day of lecture, laboratory and required preparation) and giving the student an opportunity to follow up those special lines of reading or observation which appeal to him.

The claim was made in a very well organized paper on "Some Mistakes in Teaching" that 25% of the student's time is lost through duplication and lack of coordination in the curriculum. There was a general belief expressed that greater emphasis must be placed on developing the student's powers of observation, and on training him to think for himself. The importance of placing medical professorships on an academic basis was evidenced in many ways.

A standard four-year high school preliminary course, as a basis for a four-year flexible medical course, was generally agreed to be the present practical requirement to be advocated from the M. D. degree. The acceptance, for membership in the American Medical Association and in State and County Societies, of ignorant and admittedly incompetent doctors was the basis for some criticism.

## A NEW MEDICAL SCHOOL FOR CALIFORNIA.

An announcement incidental to a discussion of medical education standards possesses some special interest to Californians. A medical representative of the Jesuit Order stated that in the near future that order would establish a medical college in California,—probably in San Francisco.

## THE HOSPITAL OR FIFTH YEAR.

Many interesting viewpoints were expressed concerning this subject. Dean Dodson, of the Rush Medical Department, outlined one of the most interesting plans. He believes that a strong medical department can arrange with private hospitals in towns or cities within a practical radius to provide the fifth year instruction. By the judicious selection of members of the visiting staffs of these hospitals for the purpose of this fifth year instruction, and by their appointment as clinical lecturers (or under some other title), the fifth year students can be ensured adequate practical supervision and instruction without cost to the school, and the hospitals entering into the arrangements will profit by better medical service.

There were many who believed with Dean Dodson that the question of a fifth year was more a matter of policy than of administrative difficulty. Doctor Wesbrook, Dean of Minnesota Medical Department, stated that he believed 80% of the medical graduates should be given a fifth year in practical hospital interne work, but that at least 20% of the men should be encouraged to go into a fifth year of technical laboratory work. His reasons for advocating this selection of 20% of the men for training in the non-practicing branches of the medical profession, were based upon the proportionate need of the public for research workers, laboratory diagnosticians, administrative appointments in hospitals, public health work, etc.

## UNIVERSITY HOSPITALS AND ACADEMIC PROFESSOR-SHIPS IN MEDICINE.

The university hospital as a necessary part of medical instruction equipment was actively discussed. No one, however, contested the desirability of such a hospital for research work and for the demonstration of selected and rare cases. The need for placing medical school professorships on an academic paid basis has been mentioned above. The character of much of the teaching,—clinical, laboratory, didactic-being given to-day was strongly criticized. Doctor Edward Jackson, of Denver, particularly emphasized the need for teachers who 'know what their students see and can understand." Dean Christian outlined the new plan of examinations at Harvard designed to reach this point of testing the real permanent knowledge of the student. A practice of considerable importance and one which should be widely encouraged, has been established by several medical schools, i. e., furnishing a miscroscope to each student at the beginning of his course and permitting him to pay for it on the installment plan. Several state examining boards recognize this practice by requesting each candidate to bring his own microscope to the examination.

## MEDICAL LEGISLATION.

During the sessions of the "National Confederation of State Medical Examining Boards" arrangements were practically completed for a union of all the important examining boards, the purpose being to encourage uniformity of examination standards, and to promote reciprocity in the recognition of licenses granted by the different states.

The methods of examining candidates in various states came in for some sharp criticism. Mr. Hallett particularly emphasized the point that each examination paper, or practical examination, should be read or attended by at least two members of the examining board. Any one listening to the discussions could not fail to appreciate the need for uniformity of examination procedure and for the development of some practical method for determining the fitness of a physician to transfer from one state to any other without again passing an initial examination. The personal equation in the conduct of examinations was clearly demonstrated. This was particularly brought out by certain reminiscent discussions. One state evidently places special emphasis on the ability of all candidates to use in the practical tests an ophthalmoscope properly. This results largely from the accident of having an ophthalmologist on its examining board. Another state places considerable emphasis on the ability of each candidate to name accurately a series or surgical instruments but does not follow up this test to determine whether the candidate can or has ever used them.

In general, legislation toward greater flexibility in examinations, together with more attention given to practical tests, was urged. Undoubtedly the public should make less effort in devising rules for concealing the identity and personality of the applicant, and make more effort to select well trained and properly fitted persons for examiners, supplying these examiners with funds and equipment to conduct thorough examinations-not "unsight and unseen" through the point of a pen, but openly through face to face examinations in the diagnosis room with a series of patients as the basis for at least fifty per cent. of the test. California came in for a good deal of criticism. A well known Federal officer, for example, said he had passed the medical examinations in a number of states and those conducted by the Government. From his personal experience he considered Michigan's examination the fairest and best test, while California's was by far From individual conversations it is the worst. the opinion of your representative that much of the criticism of California's law is based upon personal grounds, especially upon the experiences of candidates who feel that they did not receive the common courtesies which should be extended to all candidates by those in charge of examinations.

## REPORTS OF MEMBERS OF THE NATIONAL LEGISLATIVE COUNCIL.

The reports submitted on recent medical legislation in the several states show a very general condition of medical unrest throughout the United States. Except in a few states, medical licensing laws have remained unchanged during the past year, or have been sharply assailed with varying degrees of success in modifying them. Public health legislation has constituted the chief fighting ground, and some effective new laws have been passed. Everywhere this gain has been attended by active opposition lobbying.

The new Medical Practice Act of Pennsylvania illustrates fairly well the trend of modifications of the earlier acts which may be looked for in the next few years. This act, among its other provisions, requires the proper registration and a record of all legal practitioners of medicine in the state to be kept for public reference in the office of the Commissioner of Education. It provides for the examining and issuance of a "limited license" to qualified neuropaths, optometrists, or other practitioners of any special method of treating disease, as "limited practitioners." Persons desiring to practice massage, or various manipulations of the body without obtaining a license as a legalized physician or a limited practitioner, must work under the direction of a regularly qualified physician. The bureau having the administration of this law in hand has been given large powers in the matter of making rules and regulations governing medical practice. The personnel consists of the Commissioner of Public Education, Commissioner of Health, and five other members; it being expressly provided that a majority of these members cannot be named from the practitioners of any one legal "system" of medicine.

#### A MEDICAL EFFICIENCY BOARD.

It is possible that the time may be near at hand in California when a board of qualified paid men may be appointed to administer medical protection laws, just as similar boards are now provided for safeguarding the public in all relations with insurance companies, building and loan associations, banks, railroads, etc. The licensing of medical practitioners, nurses and hospitals will in all probability be under review again during the 1913 session of the California legislature.

#### THE PUBLIC HEALTH.

The sessions of the Conference on Public Health were largely devoted to ways and means for improving vital statistics returns, and to railway sanitation. Doctor Wilbur, Chief of the Vital Statistics Division of the Census, explained the model statistics law advocated by the bureau, and particularly emphasized the present need for bringing up the reporting of births. There are at present only two or three states on the provisional registration area for births. It is to be hoped the Medical Society may actively support the efforts of the State Board of Health to get California placed on this provisional registration area before 1913.

The activities of the Association for the Conservation of Vision were presented and interestingly discussed. The physician's part in preventing blindness, particularly from ophthalmia neonatorum, was argued at length.

Local and state measures on many subjects were discussed; and the essentials of food and drug legislation were ably presented. The control of syphilis and gonococcus infections was brought up, discussed, and as usual—dropped without definite resolutions or action. The paper by Commissioner of Health Young, on "What Education and Training are Necessary for State and Municipal Health Officers" was not read, owing to the necessary absence of Doctor Young, but the subject was indirectly discussed in many ways during the sessions. It is evident that many observers feel that the health officers of the future must be specially trained non-practicing physicians, who will be selected for merit and be given security of tenure in office during efficient service.

# THE ORGANIZATION OF A COUNCIL ON PUBLIC HEALTH.

The proposed Council on Public Health was not organized, but the Council on Health and Public Instruction was requested by resolution to do everything in its power to bring about co-operative work among the large number of welfare organizations now in existence. An instance which occurred in Boston illustrates the present situation in many parts of the United States. A woman, who once had the misfortune to have to apply to a charity

organization for assistance during a temporary illness of her husband, was preparing for the birth of her second child, when this fact became known to an officer of a welfare organization. The woman's record showing that she had once required aid, her name was sent to all associations interested in any phase of eugenics or infant mortality with the result that within the space of a few months she was visited by no less than seven amateur information gatherers and instructors representing as many different societies. Each of these representatives had long lists of questions to be answered, and desired to give this mother advice, much to her personal annoyance and the disgust of her attending physician.

Such societies undoubtedly do a great deal of good, but there are too many of them. The American Medical Association can do a great service to the cause of medical sociology by aiding the judicious consolidation of these societies into a few strong organizations covering large divisions of the preventive medicine field.

The State Society in California, the medical schools, and all those interested in the health conservation movement should give immediate attention to the problem of desirable legislation to be enacted in 1913. Legislation along these lines in favor of selfish interests is certain to be introduced, and unless the medical profession and the general public working together devise liberal, effective statutes to meet the points raised in favor of selfish bills, it will be difficult for the legislators to detect the "flaws" in the latter.

MINUTES OF THE ANNUAL MEETING OF THE CALIFORNIA ASSOCIATION FOR THE STUDY AND PREVENTION OF TUBERCULOSIS, APRIL, 1912.

The annual meeting of the California Association for the Study and Prevention of Tuberculosis was held Wednesday, April 17th, at the Hotel Del Monte, Del Monte, California.

The meeting was called to order by the President, Dr. George H. Kress of Los Angeles, and the annual report of the Secretary and Treasurer for 1911-12 was read.

It was moved, seconded and carried that the report be accepted and ordered placed on file.

It was moved by Dr. W. Jarvis Barlow and seconded by Dr. Geo. H. Evans of San Francisco, that the report of the Secretary be published in the STATE JOURNAL and also that it be given publicity in the lay press. Motion carried.

While discussing this motion the consensus of opinion was that it was desirable that emphasis be placed upon the fact that the financial balance for the year was wholly inadequate for carrying on the work of such great magnitude as that of attempting to combat tuberculosis in the State of California.

The matter of charging for membership in the State Association was brought up for consideration, but no action was taken.

There was also some discussion of the subject of moving picture films for illustrating public health lectures. No action was taken on this matter.

It was moved, seconded and carried that the Association proceed to organization.

After some discussion of the plans for the ensuing year, it was decided to proceed to the election of officers.

For the office of President for the ensuing year, the name of Dr. George H. Evans, of San Francisco, was presented, and duly seconded.

There being no further nominations the Secretary was instructed to cast the ballot of the California Association for the Study and Prevention of Tuberculosis, for Dr. George H. Evans of San Francisco, for President for the ensuing year, and the ballot was cast.

For Vice-President, Dr. Robert A. Peers of Colfax, was nominated.

There being no further nominations the Secretary was instructed to cast the ballot of the Association for Dr. Robert A. Peers of Colfax for First Vice-President for the ensuing year. The ballot was cast.

For Second Vice-President the name of Dr. Edward von Adelung of Oakland, was presented.

There being no further nominations the Secretary was instructed to cast the ballot of the Association for Dr. Edward von Adelung of Oakland, for Second Vice-President for the ensuing year. The ballot was cast.

For the office of Secretary and Treasurer, the name of Dr. George E. Tucker of Riverside, was presented.

There being no further nominations the President was instructed to cast the ballot of the Association for Dr. George E. Tucker of Riverside, for Secretary and Treasurer for the ensuing year, and the ballot was cast.

It was moved, seconded and carried that the officers elected, act as a committee of the whole, unless the Constitution and By-Laws made other provision.

The nomination of a Board of Directors was next in order.

It was moved, seconded and carried that the President appoint a committee of three to act as a nominating committee, and in accordance with that motion the President appointed Dr. Robert A. Peers of Colfax, Dr. Edw. von Adelung of Oakland, and Dr. George E. Tucker of Riverside.

The committee brought in the following report for nomination for Directors of the Association:

- 1. Dr. George H. Kress, Los Angeles.
- 2. Dr. F. M. Pottenger, Los Angeles.
- 3. Dr. W. Jarvis Barlow, Los Angeles.
- 4. Dr. C. C. Browning, Los Angeles.
- 5. Dr. George E. Malsbary, Los Angeles.
- 6. Dr. L. M. Powers, Los Angeles.
- 7. Mr. S. C. Evans, Riverside.
- 8. Mr. E. S. Moulton, Riverside.
- 9. Mrs. M. M. Pentoney, Riverside.
- 10. Dr. F. C. E. Madison, Pasadena.